EXPERIMENT - 3

Object Oriented Programming Lab

Aim

Using concept of function overloading, write function for calculating area of triangle, circle and rectangle.

Syeda Reeha Quasar

14114802719

4C7

EXPERIMENT – 3

Aim:

Using concept of function overloading, write function for calculating area of triangle, circle and rectangle.

Source Code:

```cpp
#include <iostream>
using namespace std;

int area(int l, int b){
    return l * b;
}

float area(float r){
    return 3.14 * r * r;
}

float area(float b, float h){
    return (b * h)/2;
}

int main(){
    int l, b;
    float r, ba, he;
    cout << "Enter length and breadth of rectangle" << endl;
    cin >> l >> b;
    cout << "Area of rectangle is: " << area(l, b) << endl;
    cout << "Enter radius for circle"<<endl;
    cin >> r;
    cout << "Area of circle is: " << area(r) << endl;
    cout << "Enter base and height of triangle" << endl;
    cin >> ba >> he;
    cout << "Area of triangle is: " << area(ba, he) << endl;
    return 0;
}
```

Output:

```
PS D:\sem 4\cpp\oops> cd "d:\sem 4\cpp\oops\" ; if ($?) { g++ Areas.cpp -o Areas } ; if ($?) { .\Areas }
Enter length and breadth of rectangle
2 3
Area of rectangle is: 6
Enter radius for circle
2
Area of circle is: 12.56
Enter base and height of triangle
12 3
Area of triangle is: 18
PS D:\sem 4\cpp\oops> cd "d:\sem 4\cpp\oops\" ; if ($?) { g++ Areas.cpp -o Areas } ; if ($?) { .\Areas }
Enter length and breadth of rectangle
3 12
Area of rectangle is: 36
Enter radius for circle
5
Area of circle is: 78.5
Enter base and height of triangle
4 12
Area of triangle is: 24
PS D:\sem 4\cpp\oops>
```